resinification taking place. Still more complicated, and also accompanied by resinification, is the reaction in the presence of azoisobutyric dinitrile, as copolymerization both of the initial monomers and of the reaction products takes place. The polymers are soluble in water as well as in alcohol. The acylation investigated can also be applied to the diethanol amine divinyl ether. N-acetyl diethanol amine divinyl ether, b.p. 120 - 121°C/4 mm Hg, n_D^{20} = 1.4778, d_4^{20} = 1.034 is formed. The synthesized N-acetyl derivatives of the amino ethanol vinyl ether are new monomers, containing both a vinyl and an amino group as functional group. There are 2 tables.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR)

SUBMITTED: June 6, 1962

S/062/63/000/003/011/018
B101/B186

AUTHORS: Chekulayeva, I. A., Lipovich, I. V., and Shostakovskiy, M.F.

TITLE: Synthesis and transformation of the amino ethanol vinyl ethers. Communication 15. Polymerization of amino ethanol vinyl ethers

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 3, 1963, 535 - 540

TEXT: As a result of the polymerization of amino ethanol vinyl ethers in the presence of azoisobutyric dinitrile at 60°C in ampuls are given: Formula of the vinyl ether, its b.p. (°C/mm Hg), n_D^{20}, the yield of polymer, the molecular weight of it and a short characterization of the polymer. The data given are: $CH_2=CHOCH_2CH_2NH_2$, 115 - 116, 1.4390, 14 - 15, -, viscous, yellow, soluble in water and alcohols; $CH_2=CHOCH(CH_3)CH_2NH_2$, 127 - 128, 1.4380, 10 - 11, -, in like manner; $CH_2=CHOCH_2CH_2N(C_2H_5)_2$, 155 - 157, 1.4328, 7 - 8, 435 - 451, viscous, yellow, soluble in ether, benzene, acetone, methanol; $CH_2=CHOCH_2CH_2N(CH_3)_2$, 158 - 159/3, 1.5980,

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Synthesis and transformation of ...

10 - 11, 475, viscous, yellow, soluble in acetone and benzene; $(CH_2{=}CHOCH_2CH_2)_2NH$, 80 - 81/8, 1.4576, 19 - 21, 1490 - 1550, viscous, dark yellow, soluble in acetone, benzene and alcohols; $(CH_2{=}CHOCH_2CH_2)_2NC_4H_9$, 90 - 91/4, 1.4536, 18 - 40,-, likewise; $(CH_2{=}CHOCH_2CH_2)_2NCH_2COOCH_3$, 126 - 127/5, 1.4640, 20 - 21, -, likewise; $(CH_2{=}CHOCH_2CH_2)_2NCH_2CH_2COOCH_3$, 124 - 125/5, 1.4652, 20 - 22,-, likewise; $CH_2{=}CHOCH_2CH_2NHCH_2CH_2OH$, 95 - 96/4, 1.4687, 5-7,-, viscous, yellow, soluble in alcohols; $CH_2{=}CHOCH_2CH_2N(CH_2CH_2OH)_2$, 141-142/3.5, 1.4805, 6-7, -, viscous, yellow, soluble in water and alcohols; $(CH_2{=}CHOCH_2CH_2)_2NCH_2OH$, 125 - 126/4.5, 1.4725, 19 - 20,-, solid, yellow, insoluble in usual solvents, non-meltable; $(CH_2{=}CHOCH_2CH_2)_3N$, 120 - 122/5, 1.4678, 38 - 40, -, likewise; $CH_2{=}CHOCH_2CH_2NHCOCH_3$, 104 - 105/3, 1.4671, 68 - 70,-, colourless, rubberlike, soluble in water and alcohols; $(CH_2{=}CHOCH_2CH_2)_2NCOCH_3$, 120 - 121/4, non-meltable. The N-butyl diethanol amin divinyl ether was for the first time synthesized from N-butyl di-

Card 2/3

ethanol amin and acetylene at 14 atm, 160°C; the amino-isopropanol vinyl ether from amino ispropanol and acetylene at 15 atm, 140 - 150°C; the methyl-N-divinyl oxyethyl-α-amino-acetate from diethanol amin divinyl ether and methyl chloroacetate and the methyl-N-divinyl oxyethyl-β- aminoproprionate from diethanol amino divinyl ether and methyl acrylate. There is 1 table.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR)

SUBMITTED: June 6, 1962

SHOSTAKOVSKIY, M.F.; CHEKULAYEVA, I.A.; KONDRAT'YEVA, L.V.

Interaction of diacetylene with bifunctional compounds.
Dokl. AN SSSR 153 no.6:1353-1355 D '63. (MIRA 17:1)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
2. Chlen-korrespondent AN SSSR (for Shostakovskiy).

SHOSTAKOVSKIY, M. F.; CHEKULAYEVA, I. A.; KONDRAT'YEVA, L. V.; L
LOPATIN, B. V.

Interaction of diacetylene with amino alcohols and amines. Report No. 3: Stereochemistry of the addition of alkyl amines and dialkyl amino alcohols to the triple bond of diacetylene and 1-buten-3-ynes. Izv. AN SSSR Otd. khim. nauk no.12:2217-2220 D '62. (MIRA 16:1)

1. Institut organicheskoy khimii im. N. D. Zelinskogo AN SSSR.

(Amines) (Alcohols) (Butadiyne)
(Butenyne)

KONDRAT'YEVA, L.V.; CHEKULAYEVA, I.A.; SHOSTAKOVSKIY, M.F.; LOPATIN, B.V.

Addition of unsaturated amines to diacetylene. Izv.AN SSSR. Ser.khim. no.1:160-162 Ja '64. (MIRA 17:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

SHOSTAKOVSKIY, M.F.; CHEKULAYEVA, I.A.; KONONOV, N.F.; ZARUTSKIY, V.V.; OSTROVSKIY, S.A.; ARAKELYAN, V.G.

Triethanolamine vinylation reaction. Izv. AN SSSR. Ser. khim. no.4: 698-701 '65. (MIRA 18:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

CHEKULAYEVA, I.A.; KONTRAT'YEVA, L.V.

Interaction of acetylene and acetylene compounds with amines and ammonia. Usp. khim. 34 no.9:1583-1606 S '65. (MIRA 18:10)

1. Institut organicheskoy khimii imeni Zelinskogo AN SSSR.

CHEKULAYEVA, L.

12

CA

PROCESSES AND PROPERTIES INDEX

Calculation of sugar content in evaporated milk. L. Chekulaeva. *Molochnaya Prom.* 9, No. 10, 32(1948).—For a standard product contg. 43.5% beet sugar and 27% milk solids the sugar content of the initial material is given by $K = 1.611\ C_e$ where C_e is the dry residue of the initial product. A table for rapid calcn. of sugar content from density measurements (by lactodensimeter) is provided.

G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA CHEKULAYEVA, L.

The balance between moisture and heat during cooling of condensed milk with sugar. L. Chekulayeva (Vsesoyuz. Molochnyi Inst.). *Molochnaya Prom.* 13, No. 8, 40-2 (1952).—Heat-balance equations are set up for cooling milk concentrates enriched with sugar; the conventional methods of heat-transfer calcns. are used. A simplified equation, suitable for nomographic use, is developed: $W_0 = (248 + 0.08\,t_0 + 0.002345\,q)10^{-2}$, where W_0 is the initial moisture content and t_0 is its predetd. initial temp. G. M. K.

1. CHEKULAYEVA, L., DEMIDOV, V., Eng.

2. USSR (600)

4. Milk, Condensed

7. Standardization of milk in canned milk production. L. Chekulayeva, Eng. V. Demidov. Moloch. prom. 14, No. 3, 1953.

9. **Monthly List of Russian Accessions**, Library of Congress, May 1953. Unclassified.

Chekulayeva, L. I.

USSR/ Medicine - Physiology

Card 1/1 Pub. 22 - 53/54

Authors : Chekulayeva, L. I.

Title : Effect of prolonged pain stimuli on the mitotic activity of the epithelial cells of the cornea

Periodical : Dok. AN SSSR 106/2, 371-373, Jan 11, 1956

Abstract : Experiments were conducted on white rats to determine the effect of prolonged pain stimuli on the mitotic activity of epithelial cells of cornea. The results obtained are described. Twelve references: 11 USSR and 1 USA (1935-1955). Graph.

Institution : Acad. of Med. Sc., USSR, Inst. of Exper. Medicine

Presented by: Academician N. N. Anichkov, August 19, 1955

USSR/Human and Animal Morphology. Pathological Anatomy S-5

Abs Jour : Ref Zhur - Biol., No 20, 1958, No 92837

Author : Zhirkin L.N., Chekulayeva L.I.
Inst : Institute for Experimental Medicine, Acad. of Medical Science, USSR
Title : Influence of Functional Disturbance of the Brain on Epithelium of the Skin and Cornea of the Eye

Orig Pub : Yezhegodnik. In-t eksperim. med. Akad. med. nauk SSSR, 1955, L., 1956, 376-380

Abstract : With impairment of the higher nerve activity in rats histological changes of the skin of the back, ears, soles, and the cornea of the eye were not demonstrated. The extent of mitosis in the epithelium of the cornea proved almost identical in test and control animals; only rats with an excitable nervous system showed increased mitosis. With application of a punctated burn on the cornea of the rat with an "inhibited" type of reaction there was observed some increase

Card : 1/2

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Abs Jour : Ref Zhur - Biol., No 20, 1958, No 92887

in the mitotic activity in the first twenty-four hours of the experiment, and then it decreased. With application of a tourniquet on the hind extremity of the rat mitotic activity of the epithelium of the cornea decreased at first and later increased. Apparently an adaptation to the continuous action of an irritant gradually occurred in animals. In rats with a predominantly inhibitory type of reaction the inhibition itself appeared to be an adaptation to a constantly acting irritant, which did not lead to a change in the mitotic activity; in irritated animals over-activity of the cortical processes caused an increase in mitosis, i.e., a reaction contrary to that usually observed with a transitory effect of electric current. -- Ya.Ye. Khesin

CHEKULAYEVA, L.I.

AUTHOR: Chekulayeva, L. I., 20-6-45/47

TITLE: The Rate of Physiological Regeneration of Various Parts of the Cutaneous Epithelium (Skorost' fiziologicheskoy regeneratsii razlichnykh uchastkov kozhnogo epiteliya)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 117, Nr 6, pp. 1081-1084 (USSR)

ABSTRACT: It was repeatedly proved that during the cornification of the epithelial cells sulphur-containing proteins are accumulated in them (reference 1,2). By autoradiography (reference 3) it was also possible to discover an accumulation and displaceme-nt of S^{35} according to certain rules, which corresponded to the direction of differentiation. From this may be concluded that the rate of displacement corresponds to that of physiological regeneration. As the horny layer of the cutaneous epithelium in relation to other layers is not equally thick, the rate of regeneration of the horny layer in individual parts of the skin is different (reference 4). The author autoradiographically studied this rate in differently built parts of the epithelium (sole of the foot, back and horny layer (cornea)). For this purpose methionine labelled with S^{35} was in a quantity of 0,5 μCu/g subcutaneously introduced in grown rates. The animals were killed after 1,4,6,12 and 24 hours and after 2,3,5 and 10 days. The structure of the indivi-

Card 1/3

The Rate of Physiological Regeneration of Various Parts of the Cutaneous Epithlium. 20-6-45/47

dual types of epithlium, the coloring of the microtome sections and the method of measuring the radioactivity are described. From the obtained results follows that the epithelium of the three parts of skin mentioned absorb S^{35} with a different intensity. The ratio in animals killed 1 hour after the introduction of radiomethionine was as follows: basal layer of the sole: skin of the back: horny layer = 0,73 : 0,37 : 0,12. From the rate of displacement of S^{35} in the horny layer of epithelium of the back and the sole may be concluded that this layer at the back regenerates with a speed of 3,3 (3)μwithin 24 hours. For the horny layer of the sole the same value amounts to 9,33μ. A peculiarity of the S^{35}-distribution in the epithelium becoming horny is the selective accumulation of sulphur before the beginning of the cornification in the cells of the stratum spinosum (prickly cells). In the epithelium which does not become horny the distribution of S^{35} only reflects the protein metybolism which depends on the physiological activity of the cells. It is in this case possible to determine the rate of regeneration of the surface cells from the modification of the distribution of S^{35} in the course of time. The accumulation of large quantities of radiosulphur in the epithe-

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lial cells of the surface of the cornea 48 hours after the introduction of methionine might be explained by the displacement of the cells of the middle layers at the surface, as the former contain sufficient amounts of S^{35}. It is therefore to be assumed that the 2 layers of the surface cells of the horny layer are regenerated within 48 hours. There are 3 figures, 3 tables, and 4 references, 3 of which are Slavic.

ASSOCIATION: Institute of Experimental Medicine of the Academy of Medical Sciences USSR (Institut eksperimental'noy meditsiny Akademii meditsinskikh nauk SSSR)

PRESENTED: September 12, 1957, by N.N. Anichkov, Academician

SUBMITTED: September 7, 1957

AVAILABLE: Library of Congress

CHEKULAYEVA, L. I., Candidate of Biol Sci (diss) -- "The dynamics of inclusion of S-35 in methionine and the rate of physiological regeneration of epithelium of the dermal type in postnatal development". Leningrad, 1959. 16 pp (Inst of Experimental Med of the Acad Med Sci USSR), 200 copies (KL, No 22, 1959, 112)

CHEKULAYEVA, L.I.

Radioautographic investigation of age characteristics of physiological regeneration of the epidermis and hair. Biul. eksp. biol. med. 47 no.2: 112-115 F '59. (MIRA 12:4)

1. Iz laboratorii gistologii (zav. - prof. L.M. Zhinkin) Instituta eksperimental'noy meditsiny (dir. - chlen-korrespondent AMN SSSR prof. D. A. Biryukov) AMN SSSR, Leningrad. Predstavlena deystvitel'nym chlenom AMN SSSR V.V. Parinym.

(RADIOAUTOGRAPHY,
of skin & hair regen. (Rus))
(SKIN, physiol.
regen., radioautography (Rus))
(HAIR,
same)
(REGENERATION
hair & skin, radioautography (Rus))

CHEKULAYEVA, L.I. (Leningrad, Nab.Chernoy rechki, 10, kv. 47).

Autoradiographic study of skin epithelium in tissue cultures by F.M. Lazarenko's method. Arkh. anat. gist. i embr. 41 no.12:57-63 D '61. (MIRA 15:3)

1. Laboratoriya eksperimental'noy gistologii (zav. - prof. V.P. Mikhalov) Institut eksperimental'noy meditsiny AMN SSSR.
(TISSUE CULTURE) (SKIN)
(EPITHELIUM) (AUTORADIOGRAPHY)

CHEKULAYEVA, L.I.

Cell proliferation, protein and nuclein metabolism in inflammatory excresences of the epithelium. Arkh. anat., gist. i embr. 44 no.6: 87-92 Je '63. (MIRA 17:7)

1. Laboratoriya eksperimental'noy gistologii (zav. - prof. V.P. Mikhaylov) Instituta eksperimental'noy meditsiny AMN SSSR, Leningrad. Adres avtora: Leningrad, P-22, Kirovskiy prospekt, 69/71. Institut eksperimental'noy meditsiny AMN SSSR, Laboratoriya eksperimental'noy gistologii.

BRIO, Nataliya Petrovna; KONOKOTINA, Nadezhda Petrovna; TIOV Aleksandr Ivanovich; PICHUGINA, N.V., inzh., retsenzent; CHEKULAYEVA, L.V., kand. tekhn. nauk; BOGATAYA, L.M., red.; ZARSHCHIKOVA, L.N., tekhn. red.

[Production and chemical control in the dairy industry] Tekhnokhimicheskii kontrol' v molochnoi promyshlennosti. Moskva, Pishchepromizdat, 1962. 395 p. (MIRA 16:6)
(Milk--Analysis and examination)
(Dairy industry--Quality control)

CHEKULAYEVA, Lidiya Vasil'yevna; KIVENKO, S.F., retsenzent; ZYABREVA, S.M., red.

[Establishing milk norms in the manufacture of canned milk products] Normalizatsiia moloka pri proizvodstve molochnykh konservov. Izd.2., dop. Moskva, Pishchevaia promyshl., 1965. 55 p. (MIRA 18:3)

CHEKULAYEVA, V.V.; SAFRAY, B.A.

Acid-resistant sole rubber for the footwear of the workers in chemical industries. Kozh.-obuv. prom. 7 no.5:21-26 My '65. (MIRA 18:8)

BERG, P.D.; GOL'DSHTEYN, R.I.; ZEL'KIND, Ye.M.; TOMASHPOL'SKIY, L.M.; FEDOROV, I.V.: IVANOV, V.A.; CHEKULAYEVA, Yu.I.; KURCVA, E.A., red.; NIKOLAYEVA, Ye.A., ved. red.; MASOLOV, Ya.M., tekhn. red.

[Petroleum refining in capitalist countries; statistical studies] Neftepererabatyvaiushchaia promyshlennost' kapitalisticheskikh stran; statisticheskii sbornik. Moskva, Vol.1. [Petroleum refining and petroleum products] Pererabotka nefti i proizvodstvo nefteproduktov. 1960. 219 p. Vol.2. [Consumption, transportation, and storage of petroleum and petroleum products] Potreblenie, transport i khranenie nefti i nefteproduktov. 1961. 323 p. (MIRA 15:6)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut nauchnoy i tekhnicheskoy informatsii.
(Petroleum--Refining) (Petroleum industry--Statistics)

GOLDSHTEYN, R.I.; ZEL'KIND, Ye.M.; TSEYTLIN, S.I.; CHEKULAYEVA, Yu.I.; KUROVA, E.A., ved. red.; SOLOV'YEVA, S.S., ved. red.

[Petroleum refining abroad; a statistical and economic collection] Neftepererabotka za rubezhom; statistiko-ekonomicheskii sbornik. Moskva, TsNIIITEIneftegaz, 1963. 112 p. (MIRA 17:12)

1. Moscow. TSentral'nyy nauchno-issledovatel'skiy institut informatsii i tekhniko-ekonomicheskikh issledovaniy po neftyanoy i gazovoy promyshlennosti.

KARTSEVA, V.D.; CHEKULAYEVA, Yu.S.; KORCHAGIN, V.B.; BRUNS, B.P.

Determination of streptomycin a culture solutions obtained from an enriched medium. Antibiotiki 5 no.4:50-53 Jl-Ag '60. (MIRA 13:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(STREPTOMYCIN)

YAKHONTOVA, L.F.; BRUNS, B.P.; CHEKULAYEVA, Yu.S.; SHELLENBERG, N.N.; VAKULENKO, N.A.; KOVARDYKOVA, S.N.

Choice of the optimal cationite in producing streptomycin by means of ion-exchange sorption. Med. prom. 15 no.1:21-29 Ja '61. (MIRA 14:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(STREPTOMYCIN) (ION EXCHANGE)

YAKHONTOVA, L.F.; BRUNS, B.F.; CHEKULAYEVA, Yu.S.; SHELLENBERG, N.N.; VAKULENKO, N.A.; KOVARDYKOVA, S.N.

Production of highly purified streptomycin sulfate by means of carboxycation exchange resins. Med. prom. 15 no.6:26-32 Je '61. (MIRA 15:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(STREPTOMYCIN)
(ION EXCHANGE RESINS)

YAKHONTOVA, L.F.; BRUNS, B.P.; CHEKULAYEVA, Yu.S.

Use of carboxyl cation exchanges for the separation and refining of antibiotic substances. Zhur.prikl.khim. 35 no.5:1101-1108 My '62. (MIRA 15:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(Antibiotics) (Ion exchange)

TRIFONOVA, Nina Fedorovna; CHEKULAYEVA, Zoya Danilovna; BEN'KOVA, N.P., doktor fiz.-mat. nauk, red.; BRONSHTEN, V.A., red.; MASEVICH, A.G., doktor fiz.-mat. nauk, red.; MOSHENTSEVA, I.I., red.; PLAKSHE, L.Yu., tekhn. red.

[English-Russian astronomical and geophysical dictionary] Anglo-russkii astrogeofizicheskii slovar'. Pod red. N.P. Ben'kovoi, V.A.Bronshtena, A.G.Masevich. Moskva, Glav. red.inostr. nauchno-tekhn. slovarei Fizmatgiza, 1962. 512 p. (MIRA 16:4)

(English language--Dictionaries--Russian)
(Astronomy--Dictionaries) (Geophysics--Dictionaries)

TARASOV, S.V.; CHEKUNIN, K.I., inzh., retsenzent; BARANOVA, Z.S., inzh., red.; UVAROVA, A.F., tekhn. red.

[Technological processes in the manufacture of watches] Tekhnologiia chasovogo proizvodstva. Izd.2., perer. i dop. Moskva, Mashgiz, 1963. 535 p. (MIRA 16:7)
(Clockmaking and watchmaking--Machinery)

L 5290-66 EWT(m)/EPF(c)/EWP(j)/T RPL WW/RM

ACC NR: AP5022052 SOURCE CODE: UR/0286/65/000/014/0129/0129

AUTHORS: Guseva, I. A.; Mal'kov, N. S.; Makarov, Yu. A.; Kuley, E. A.; Isaylova, I. S.; Shvareva, G. N.; Khantsis, R. Z.; Gladyshev, A. I.; Perepelkin, V. P.; Nikitina, D. M.; Chekunin, K. I.; Kodsiminskiy, V. V.

ORG: none

TITLE: Method for obtaining copolymers. Class 39, No. 144021

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 14, 1965, 129

TOPIC TAGS: copolymer, pressure casting

ABSTRACT: This Author Certificate presents a method for obtaining copolymers on the basis of methyl methacrylate and esters of acrylic acid by a suspension method. To obtain colorless copolymers suitable for fabricating products by casting under pressure, higher alcohols, e.g., cetyl, as a plasticizer, esters of phthalic acid, e.g., dicyclohexyl, as a stabilizer, and derivatives of aminocoumarone, e.g., phenyl ester of (naphtho-1', 2':4', 5')-triazoline (2')-stilbene-2-sulfonic acid, as a clarifier are added to the mixture.

SUB CODE: MT, GC/ SUBM DATE: 15May61/ ORIG REF: 000/ OTH REF: 000

Card 1/1

0901 0501

CHEKUNOV, A.A.

USSR/Physical Chemistry - Colloid Chemistry, Dispersion Systems. B-14

Abs Jour: Referat. Zhurnal Khimiya, No 3, 1958, 7355.

Author : O.M. Todes, A.A. Chekunov.
Inst :
Title : Influence of Atmospheric Turbulence of Coagulation Kinetics of Aerosols.

Orig Pub: Kolloidn. zh., 1957, 19, No 4, 490-495.

Abstract: Small-scale turbulent pulses do not essentially increase the constants of the coagulation rate at the movement of an aerosol cloud consisting of minute particles of dimensions of the 10^{-6} to 10^{-5} cm order. Large-scale pulses disperse and enlarge the cloud and decrease the absolute coagulation rate by it. Therefore, the particle dimensions of an aerosol cloud in the atmosphere increase considerably slower with time than in a closed space.

Card : 1/1 -7- USCOMM-DC-54637

Distr: 4E4j/4E3d

Light dispersion by coagulating aerosols. O. M. Todes and A. A. Chekunaev. *Kolloid. Zhur.* 19, 633-6(1957).—If ω is the vol. of a particle, its "scattering cross-section" F is $B\omega^2$ or $A\omega^{2/3}$ according to whether its radius is much smaller or much greater than the wave length; B and A are const. In the intermediate range, $F = AB\omega^2/(A + B\omega^{1/3})$ is satisfactory. If Smoluchowski's coagulation theory is accepted, ω increases in time so that the decrease in light intensity per cm. and unit concn. of aerosol, divided by the standard decrease, is $\theta = \tau/(1 + \tau^{1/3})$; τ = time divided by the standard time. Both standard values depend on kT, particle d., gas viscosity, wave length, n_s, and concn. This equation was confirmed on petroleum mists.

J. J. Bikerman

TODES, O.M. (Leningrad); FEDORTSOV, V.F. (Leningrad); CHEKUNOV, A.A. (Leningrad)

Experimental investigations of the light scattering of coagulating aerosols. Koll.zhur. 22 no.1:90-96 Ja-F '60. (MIRA 13:6)
(Aerosols--Optical properties)

CHEKUNOV, A.S.

Histochemical studies on thiol groups of proteins in various structures of the visual analysor in rabbits and guinea pigs in ontogenesis. Zhur.vys.nerv.deiat 14 no.1:155-160 Ja-F '64. (MIRA 17:6)

1. Laboratoriya biogistokhimii Instituta mozga AMN SSSR.

CHEKUNOV, A.S.

Histochemical analysis of some protein substances in cellular formations of the visual analyso of animals born at an early stage (rabbits) or at a later stage (guinea pigs) of the ontogenic development. Biul. eksp. biol. i med. 57 no. 2:109-113 F. '64.
(MIRA 17:9)

1. Laboratoriya biogistokhimii (zav. - prof. V.V.Portugalov) Instituta mozga (dir. - deystvitel'nyy chlen AMN SSSR S.A.Sarkisov) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR S.A.Sarkisovym.

L 14152-66 EWT(m)

ACC NR: AP6001317 SOURCE CODE: UR/0248/65/000/009/0044/0052

AUTHOR: Voytkevich, A. A.; Tkachev, A. V.; Chekunov, A. S.; Obchinnikova, G. A.; Palyga, G. F.

ORG: Institute of Medical Radiology, AMN SSSR, Obninsk (Institut meditsinskoy radiologii AMN SSSR)

TITLE: Reaction of the neurosecretory nuclei of the hypothalamus, thyroid, and adrenal glands to radiation injury of the organism

SOURCE: AMN SSSR. Vestnik, no. 9, 1965, 44-52

TOPIC TAGS: ionizing radiation, pathogenesis, endocrinology, polonium, radiation sickness, radioisotope

ABSTRACT: Study of the neurosecretory nuclei in rats exposed to polonium 210 revealed a three-stage development of changes in the neurons of the paraventricular and supraoptic nuclei. Immediately after exposure the neurosecretion flowed rapidly along the axons, after which elimination and synthesis were in a state of relative balance. Finally, inhibition of neurosecretion set in, ending in partial destruc-

UDC: 617-001.28-07 : [616.831.4+616.441+616.45]-008.6-076.916

Card 1/2

L 14152-66
ACC NR: AP6001317

tion of the neurons. The adrenals were studied on the same material at different periods of acute radiation sickness. Within 24 hours of exposure the glands increased in weight almost 1½ times. This increase as well as the histological changes were indicative of marked hypertrophy of the glands due to intensified production of hormones. The structural and functional changes observed in the thyroid were more or less similar to those in the adrenals. Under normal conditions the peripheral endocrine glands are elements in a "closed" system--hypothalamus-hypophysis-thyroid--adrenal-hormone--metabolism in peripheral tissue. Introduction of Po^{210} disrupts hormone metabolism, which gives rise to compensatory intensification of the thyrotropic and adrenocorticotropic functions of the hypophysis, resulting in hyperstimulation of the thyroid and adrenals. The isotope accumulates selectively in the neurosecretory nuclei of the hypothalamus and ultimately destroys them. Orig. art. has: 2 figures, 1 table.

SUB CODE: 06/ SUBM DATE: 05Jun65/ ORIG REF: 012/ OTH REF: 000

Card 2/2

SOLLOGUB, V.B.; CHEKUNOV, A.V.; KALYUZHNAYA, L.I.; KHILINSKIY, L.A.; KHARECHKO, G.Ye.

Internal structure of the crystalline basement in the southwestern part of the Korosten' pluton according to seismic data. Geofiz. sbor. no. 5:122-130 '63. (MIRA 17:5)

1. Institut geofiziki AN Ukr. SSR.

CHEKUNOV, A.V.; LYUL'YEV, Yu.B.

Hercynian tectonic structure in the southern Ulutau and the western part of the Dzhezkazgan Depression. Izv.vys.ucheb.zav.; geol.i razv. 7 no.8:3-15 Ag '65.

(MIRA 18:11)

1. Kiyevskiy gosudarstvennyy universitet im. T.G.Shevchenko.

CHEKUNOV, A. V. Cand Geol-Min Sci -- (diss) "Tectonics of the Azov-Kuban' depression." Kiev, 1957. 22 sheets (Min of Higher Education UkSSR. Kiev State Univ im T. G. Shevchenko). Printed by duplicating machine (KL, 49-59,139)

CHEKUNOV, A.V.

Basic features of the tectonic pattern of the Kuban-Azov Lowland. Nauk.zap.Kyiv.un. 16 no.14:53-62 '57. (MIRA 13:4)
(Kuban-Azov Lowland--Geology, Structural)

AUTHOR: Chekunov, A.V. 21-1-17/26

TITLE: Geotectonic Features of the Azov-Kuban' Depression in the Paleocene (Geotektonicheskiye cherty Azovo-Kubanskoy vpadiny v paleotsene)

PERIODICAL: Dopovidi Akademii Nauk Ukrains'koi RSR, 1958, # 1, pp 72-75 (USSR)

ABSTRACT: The author analyzed geological and geophysical data on the Azov-Kuban' depression and described the main features of geotectonic processes and the history of development of this depression during the Paleocene epoch. On the basis of seismic survey data and materials of prospective drilling, the author compiled maps with isopachytes and lithofacies of the Lower- and Upper-Paleocene deposits, which are presented in the article.

According to his results, the author states that the center of tectonic activity in the Paleocene epoch shifted from the Crimea to the foothills of the Caucasus and was located in the zone of a frontal sag which arose there. As a result, the geotectonic regime of the Indol depression changed considerably: the intensive sagging, which proceeded during the Cretaceous period, slowed down and at the end of the

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Geotectonic Features of the Azov-Kuban' Depression in the Paleocene

Lower-Paleocene epoch, it had even started to rise. The levelling process of the tectonic conditions, which began in the Upper-Cretaceous epoch, is still continuing in various sections of the plateau part of the Azov-Kuban' depression.

The article contains 2 maps and 7 Russian references.

ASSOCIATION: Kiyev State University imeni T.G. Shevchenko (Kyivs'kyy derzhavnyy universytet imeni T.H. Shevchenka)

PRESENTED: By Academician of the Ukrainian Academy of Sciences N.P. Semenenko (Ukrainian spelling: M.P.)

SUBMITTED: 16 July 1957

AVAILABLE: Library of Congress

Card 2/2 1. Geology 2. Paleoecology

AUTHOR: Chekunov, A.V. SOV-21-58-4-16/29

TITLE: Geotectonic Features of the Azov-Kuban' Depression During Maykop Time (Geotektonicheskiye cherty Azovo-Kubanskoy vpadiny v Maykope)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1958, Nr 4, pp 422-425 (USSR)

ABSTRACT: The history of the geotectonic development of the Azov-Kuban' depression has not been sufficiently defined. The author studied geological and geophysical data and materials of previous investigations, and compiled the charts of isopachites and lithofacies of the Upper, Middle and Lower Maykop ages. Considerable sinking within the Indol' depression became evident on the basis of this study. The sagging of the Kuban' depression was by far slower at that time. Folding processes show considerable development within the frontal sag. In the platformic part of the depression, the process of levelling of geotectonic conditions is nearing completion. The Stavropol' elevation sank during the Maykop age and almost disappeared. The

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deposits of the Maykop age are very uniform in lithological respect within the Azov-Kuban' depression. There are 2 charts and 8 Soviet references.

ASSOCIATION: Kiyevskiy gosudarstvennyy universitet imeni T.G. Shevchenko (Kiyev State University imeni T.G. Shevchenko)

PRESENTED: By Member of the AS UkrSSR, N.P. Semenenko

SUBMITTED: July 16, 1957

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration.

1. Geophysics--USSR 2. Geology--USSR 3. Geological time --Determination

CHEKUNOV, A.V.

Geotectonic characteristics of the Azov-Kuban basin in the lower Cretaceous epoch. Izv. vys. ucheb. zav.; geol. i razv. 1 no.12: 46-51 D '58. (MIRA 12:12)

1. Kiyevskiy gosudarstvennyy universitet.
(Azov region--Geology, Structural) (Kuban--Geology, Structural)

CHEKUNOV, A.V.

Geotectonic development of the Crimean-Caucasian foremost fault and its principal characteristics. Geol. zhur. 18 no.1:77-90 '58. (MIRA 11:5)

(Crimea--Geology, Structural)
(Caucasus--Geology, Structural)

3 (5)

AUTHOR: Chekunov, A. V. SOV/20-126-2-41/64

TITLE: On Certain Laws in the Development of the Crimea-Caucasus Anterior Downwarping (O nekotorykh zakonomernostyakh razvitiya Krymsko-Kavkazskogo peredovogo progiba)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 2, pp 375-378 (USSR)

ABSTRACT: The downwarping mentioned in the title is a technical term for a tectonic structure. In publications it is called the Indolo-Kubanskaya, or the Indolo-Krasnodarskaya depression (Ref 6, Fig 8, Ref 8, Fig 1 and Ref 7). The author chose the term given in the title, in order to avoid too accurate geographical definitions as to the position of this downwarping, and to underline its geotectonic classification. A few general conclusions may be drawn (Refs 5, 9 et al). The said downwarping is a peculiar and interesting example of a total anterior downwarping. Its genesis and development was conditioned by the tectonic action and the effect of the geosynclines of the Krym (Crimea) and the Bol'shoy Kavkaz (Great Caucasus). These geosynclines developed somewhat individually within the Alpine stage and asynchronously

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underwent the geosynclinal development stages, that of the Crimea being before the Caucasian (Refs 1, 4, 10). The said downwarping was formed in the Crimea during the Alpine stage, probably in the middle Jurassic. Mountains have arisen in the south (according to V. N. Aleksandrova). The downwarping of the Eastern Crimea was formed in Kimmeridian-Titonian in the north of the rising Sudak-Karadag Fold-zone. It shifted towards the north in the Neocomian and came to rest roughly within the present Indol'skiy downwarping. The area which now covers the anterior downwarping is included within the general uplifting of the Crimea Fold-zone, and in Upper Albian it comprises the East Crimea Synclinorium. At that time the downwarping did not exist in the North-western Caucasus (Ref 9). Only towards the end of the Upper Cretaceous, or at the beginning of the Paleogene, the flysh downwarping of this part of the Caucasus was shifted northwards and transformed during the Paleozoic into the anterior downwarping. The part which sank most intensively was that lying in the district of Stanitsa Krymskaya - Azovskaya. The analysis is continued up to the Neogene. It is evident from this

analysis, that the geographic positions for both downwarpings (in the kinematic sense), in the different stages of their geological development, cannot be characterized. The structurally uniform, deeply down-warped Crimea-Caucasus anterior dawnwarping is a total structure, comprising 2 anterior downwarpings: a. Western anterior Crimea downwarping, and b. Eastern anterior Caucasus downwarping. In the course of time the geosynclinal characteristics, yet even, the transitional characteristics of several sections have been lost. They met with platform conditions, (most clearly marked in the ancient Crimea downwarping). It therefore seems that the terms (Indolo-Kubanskiy a.o.) for the downwarping, may at present only be used for the deep down-warped, total synclinal structure. There are 1 figure and 10 references, 9 of which are Soviet.

On Certain Laws in the Development of the Crimea-Caucasus Anterior Downwarping

SOV/20-126-2-41/64

ASSOCIATION: Kiyevskiy gosudarstvennyy universitet im. T. G. Shevchenko (Kiyev State University imeni T. G. Shevchenko)

PRESENTED: January 17, 1959, by N. S. Shatskiy, Academician

SUBMITTED: January 15, 1959

Card 4/4

CHEKUNOV, A.V.

Tectonics of the Azov-Kuban region. Dop.AN URSR no.8:1108-1110 '60.
(MIRA 13:9)

1. Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko. Predstavleno akademikom AN USSR V.G. Bondarchukom.
(Azov-Kuban region—Geology, Structural)

CHEKUNOV, A.V.

Basic stages in the geotectonic development of the Azov-Kuban Depression. Sov. geol. 3 no.2:57-73 F '60. (MIRA 13:11)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G.Shevchenko.
(Azov-Kuban region--Geology, Structural)

CHEKUNOV, A.V.

Geotectonic features of the Kuban-Azov Lowland in the Eocene. Geol. zhur. 20 no.2:57-62 '60. (MIRA 14:5)
(Kuban-Azov Lowland--Geology, Structural)

CHEKUNOV, A.V.

Some remarks on the tectonics and history of the development of the Crimean-Caucasian (Indol-Kuban) foredeep. Izv.vys.ucheb. zav.;geol.i razv. 4 no.10:22-29 O '61. (MIRA 14:12)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G. Shevchenko.
(Caucasus—Geology, Structural)
(Crimea—Geology, Structural)

SOLLOGUB, V.B.; CHEKUNOV, A.V.; KHILINSKIY, L.A.; GARKALENKO, I.A.

Results of experimental seismic studies of the internal structure of the crystalline basement in the northern part of the Krivoy Rog Basin. Geofiz.sbor. no.1:24-31 '62. (MIRA 16:3)

1. Institut geofiziki AN UkrSSR.
(Krivoy Rog Basin--Seismic prospecting)
(Krivoy Rog Basin--Geology, Structural)

CHEKUNOV, A.V.

Origin and initial stages of the development of the Kuban-Azov trough. Geofiz.sbor. no.2:97-106 '62. (MIRA 16:3)

1. Institut geofiziki AN UkrSSR.
(Kuban-Azov Lowland—Geology, Structural)

SOLLOGUB, V.B.; CHEKUNOV, A.V.; KALYUZHNAYA, L.T.; KHILINSKIY, L.A.

Deep-seated structure of Korosten' pluton according to seismic data. Dokl. AN SSSR 152 no.5:1215-1217 O '63. (MIRA 16:12)

1. Institut geofiziki AN UkrSSR. Predstavleno akademikom V.S. Sobolevym.

SUBBOTIN, S.I., akademik; SOLLOGUB, V.B.; CHEKUNOV, A.V.

Crustal structure of the basic structural elements of the Ukraine.
Dokl. AN SSSR 153 no.2:440-443 N '63. (MIRA 16:12)

1. Institut geofiziki AN UkrSSR. 2. AN UkrSSR (for Subbotin).

SOLLOGUB, V.B.; CHEKUNOV, A.V.; PAVLENKOVA, N.I.; GARKALENKO, I.A.; KHILINSKIY, L.A.; SHPORT, L.P.

Crustal structure of the Crimean plain and Sivash region according to geophysical data. Sov. geol. 7 no.8:44-56 Ag '64. (MIRA 17:10)

1. AN UkrSSR.

ACCESSION NR: AP4023373 S/0049/64/000/002/0196/0205

AUTHORS: Chekunov, A. V.; Pustovalova, G. M.

TITLE: The use of subcritical reflections during deep seismic sounding on the southern slope of the Ukrainian shield

SOURCE: AN SSSR. Izv. Seriya geofizicheskaya, no. 2, 1964, 196-205

TOPIC TAGS: deep seismic sounding, seismic wave, reflected wave, subcritical reflection, magnetic anomaly, gravity high, Conrad discontinuity, Mohorovicic discontinuity, mantle

ABSTRACT: Statistical treatment of many records of deep subcritical reflections, obtained from standard low-frequency instruments without any special techniques of detection, has led to recognition of a distributional pattern of velocities in the earth's crust and to an explanation of structural peculiarities of the crust. This approach has permitted correlation of deep subcritical reflections where visual studies were impossible. It is shown that these reflections represent a wave group. Data on wave velocities, obtained by statistical treatment of

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ACCESSION NR: AP4023373

travel-time curves for these subcritical reflections, indicate that the "crystalline" crust is patently a layered, inhomogeneous medium, in which jumps in velocity occur at interfaces between layers, and in which the velocity occur at interfaces between layers, and in which the velocity increases gradually with depth within the individual layers. The depth to the Conrad discontinuity has been determined to be about 18 km by means of subcritical reflections. The total thickness of the earth's crust to the Mohorovicic discontinuity is about 35 km. Structural studies by these reflections indicate an upward bulge in the Conrad and neighboring discontinuities in the vicinity of the Belozerka-Veseloye magnetic anomaly and of the corresponding gravity high. "The authors thank V. B. Sollogub and I. P. Kosminskaya for valuable advice in treating the material." Orig. art. has: 7 figures.

ASSOCIATION: Akademiya nauk USSR Institut geofiziki (Academy of Sciences UkrSSR Institute of Geophysics)

SUBMITTED: 18Mar63 DATE ACQ: 27Mar64 ENCL: 00

SUB CODE: AS NO REF SOV: 009 OTHER: 010

Card 2/2

SEMENENKO, N.P.; SUBBOTIN, S.I.; SOLOGUB, V.B.; IVANTISHIN, M.N.; CHEKUNOV, A.V.; LADIYEVA, V.D.

Structure of the abyssal zones of the earth's crust in the Ukrainian Crystalline Shield. Sov. geol. 7 no.11:48-60 N '64. (MIRA 18:2)

1. Institut geofiziki AN UkrSSR.

NEPROCHNOV, Yu.P.; NEPROCHNOVA, A.F.; ZVEREV,S.M.; MIRONOVA, V.I.; BOKUN, R.A.; CHEKUNOV, A.V.

Recent data on the crustal structure of the Black Sea trough, south of the Crimea. Dokl. AN SSSR 156 no. 3:561-564 '64. (MIRA 17:5)

1. Predstavleno akademikom D.I.Shcherbakovym.

SOLLOGUB, V.B.; CHEKUNOV, A.V.; PAVLENKOVA, N.I.; KHILINSKIY, L.A.

Nature of the Novotsaritsynskaya gravity anomaly in the Crimean plain according to seismic studies. Geofiz. sbor. no.8:3-12 '64. (MIRA 18:6)

1. Institut geofiziki AN UkrSSR.

KALYUZHNAYA, L.T.; SOLLOGUB, V.B.; CHEKUNOV, A.V.

Characteristics of the elastic waves from the interface in the crystalline basement in the southern part of the Belozerka iron-ore region and its subsurface structure. Geofiz. sbor. no.8: 34-43 '64. (MIRA 18:6)

1. Institut geofiziki AN UkrSSR.

CHEKUNOV, A.V.

Perekop transverse uplift in the northern Crimea. Geofiz. sbor. no.8 49-58 '64. (MIRA 18:6)

1. Institut geofiziki AN UkrSSR.

SOLLOGUB, V.B., doktor geol.-min.nauk; CHEKUNOV, A.V.; PAVLENKOVA, N.I.; KALYUZHNAYA, L.T.

Some characteristics of the wave pattern in the crustal fault zones of the Ukrainian S.S.R. Geofiz.sbor. no.1:32-39 '65. (MIRA 18:12)

1. Institut geofiziki AN UkrSSR. Submitted November 10, 1964.

CHUGUNNYY, Yu.G.; CHEKUNOV, A.V.; LYUL'YEV, Yu.B.; IVANUSHKO, A.S.

Geomorphological characteristics and the history of the formation of relief in the zone of the southern submersion of the Ulutau. Sbor.nauch.rab.Kiev.un. No.1:51-58 '63.

(MIRA 18:11)

CHEKUNOV, A.V.; BAZHULIN, P.A.

Study of the intermolecular interaction of pyridine with iodine by means of infrared absorption spectrography. Teoret. i eksper. khim. 1 no.4:536-540 '65. (MIRA 18:10)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

SOLLOGUB, V.B., doktor geol.-min.nauk; CHEKUNOV, A.V.; KALYUZHNAYA, L.T.; KHILINSKIY, L.A.

Structure of the upper part of the crystalline crust in the Obruch synecline region based on seismic data. Geofiz.sbor. no.1:18-26 '65. (MIRA 18:12)

1. Institut geofiziki AN UkrSSR. Submitted June 19, 1964.

BAZHULIN, P.A.; CHEKUNOV, A.V.

Concentration dependence of the intensity of infrared absorption bands of pyridine in solutions. Vest. Mosk.un. Ser. 3: Fiz., astron. 20 no.4:66-72 Jl-Ag '65. (MIRA 18:12)

1. Kafedra optiki Moskovskogo gosudarstvennogo universiteta.
Submitted April 29, 1964.

CHEKUNOV, A.V.; GARKALENKO, I.A.; KHARECHKO, G.Ye.

Deep faults in the northern part of the Black Sea region and shifting displacement along them. Izv. AN SSSR. Ser.geol. 30 no.11:63-71 N '65. (MIRA 18:12)

1. Institut geofiziki AN UkrSSR i TSentral'naya geofizicheskaya ekspeditsiya Glavnogo upravleniya geologii i okhrany nedr pri Sovete Ministrov UkrSSR. Submitted September 7, 1964.

SOLLOGUB, V.B.; GARKALENKO, I.A.; CHEKUNOV, A.V.

Tectonic structure of the northwestern part of the Black Sea based on geophysical data. Dokl. AN SSSR 162 no.6:1374-1377 Je '65.
(MIRA 18:7)

1. TSentral'naya geofizicheskaya ekspeditsiya Gosudarstvennogo geologicheskogo komiteta SSSR i Institut geofiziki AN UkrSSR. Submitted August 20, 1964.

ACC NR: AP7005453 SOURCE CODE: UR/0021/66/000/009/1194/1197

AUTHOR: Sollogub, V. B.; Cholkunov, A. V.

ORG: Institute of Geophysics AN UkrSSR (Instytut geofizyky AN UkrSSR)

TITLE: Crustal structure in the vicinity of mountainous Crimea

SOURCE: AN UkrRSR. Dopovidi, no. 9, 1966, 1194-1197

TOPIC TAGS: Mohorovicic discontinuity, physical geology

ABSTRACT: The existence of Crimean mountain "roots" is proven as a result of seismic research. The Mohorovicic discontinuity is submerged under the mountains along zones of marginal abyssal fractures at a depth of 50 km. The basaltic layer is found to be very thick and its surface is uplifted. It is one of the factors causing the presence of positive gravitational anomalies in mountainous Crimea. This paper was presented by Academician AN UkrSSR S. I. Subbotin. Orig. art. has: 1 figure.
[JPRS: 38,677]

SUB CODE: 08 / SUBM DATE: 16Sep65 / ORIG REF: 017 / OTH REF: 007

Card 1/1

0986 3321

ACC NR: AT6028370 (N) SOURCE CODE: UR/0000/65/000/000/0056/0069

AUTHOR: Subbotin, S. I.; Gurevich, B. L.; Sollogub, V. B.; Chekunov, A. V.; Chirvinskaya, M. V.; Kuzhelov, G. K. (Deceased)

ORG: none

TITLE: Deep-seated structure of the Ukraine, based on data from geophysical investigations

SOURCE: International Geological Congress. 22d, New Delhi, 1964. Geologicheskiye rezul'taty prikladnoy geofiziki (Geological results of applied geophysics); doklady sovetskikh geologov, problema 2. Moscow, Izd-vo Nedra, 1965, 56-69

TOPIC TAGS: tectonics, upper mantle, earth crust, stratigraphy / Ukraine

ABSTRACT: Geological and particularly geophysical investigations have located a great number of deep-seated faults in the Ukraine. These faults have mainly northeast and northwest strikes. The northeast-strike faults predominate in the Ukrainian shield, the Black Sea depression, and the northern part of the Black Sea basin, while northwest-strike faults are typical of the Dneprovsko-Donetskaya depression, the Trans-Carpathian depression, the folded Carpathians, the Carpathian foredeep and the southwestern part of the Russian platform. For the area, as a whole, it has been found that the macrostructural features of deep-seated faults have longitudinal or transverse strikes. Tectonic movements in the Earth's crust

Card 1/2

ACC NR: AT6028370

are mainly caused by compression and expansion of the mantle associated with polymorphic, phase and electron transformations, or chemical alterations. Deep-seated faults originate in the upper mantle hundreds or at least tens of km deep. The main types of faults located in the Ukraine are: 1) ancient Proterozoic faults in the Precambrian basement; 2) faults of different ages, expressed in the basement as major stages and separating principal structural features or their components; and 3) transverse (sometimes longitudinal) faults cutting across the main structures and separating them into individual blocks. In addition, there are many faults in the sedimentary strata which are directly or indirectly associated with the block movement of the basement. The study of the deep-seated crustal structure of the main geotectonic features of the Ukraine is based upon geophysical, mostly seismic, investigations. The block-type structure of the crust has been established, and a number of deep-seated faults have been located. A general feature is increased crustal thickness under uplifts and decreased thickness under depressions. It has been found that the granite layer contains shallow gently sloping seismic discontinuities, which may either separate different structural stages and rock complexes or represent purely physical boundaries. The Ukraine has been divided into structural zones on the basis of geological and geophysical data, and detailed characteristics of all zones are given. Orig. art. has: 2 figures.

SUB CODE: 08/ SUBM DATE: 06Jan65/ ORIG REF: 025/ OTH REF: 006/

Card 2/2

ACC NR: AT7003831 SOURCE CODE: UR/3169/66/000/018/0003/0018

AUTHOR: Sollogub, V. B.; Garkalenko, I. A.,Trifonov, P. G.; Chekunov, A. V.; Kalyuzhnaya, L. T.; Khilinskiy, L. A.

ORG: Geophysics Institute AN UkrSSR. (Institut geofiziki AN UkrSSR); Dneprogeofizika Trust (Trest "Dneprogeofizika")

TITLE: Deep structure of the Earth's crust in the Belozersk iron ore region based on seismic data

SOURCE: AN UkrSSR. Geofizicheskiy sbornik, no. 18, 1966. Geofizicheskiye issledovaniya stroyeniya zemnoy kory (Geophysical investigations of the structure of the earth's crust), 3-18

TOPIC TAGS: geologic survey, earth crust, seismology, petrology, mineralogy

ABSTRACT: Seismic investigations of the Belozersk iron ore region revealed that the basement in the region is composed of the earliest Precambrian formations and the basaltic shell is greatly uplifted. Hence it is natural to assume that a block of the Earth's crust has been elevated in the Belozersk region relative to adjacent regions. This uplifting of the block of the basaltic shell occurred along the ancient Belozersk submeridional deep fault zone and was accompanied by the penetration and fusion of basic and ultrabasic rock varieties in the upper levels of the crust. A comparison of the structural map of the surface of the basaltic

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308310020-4"

ACC NR: AT7003831

shell with the gravimetric map revealed their good qualitative agreement. Thus the gravity anomalies in the Belozersk region are due not to petrographic inhomogeneities of the basement but mainly to the surface relief of the basaltic shell. It is assumed that in other regions of the Ukrainian shield the main gravitational effect is also produced by density boundaries within the Precambrian strata. In the overall qualitative conformity of the gravitational map of the basaltic shell of the Belozersk region, no direct relation was found between the magnitude of the anomalies and the depths to the basalt. This was apparently due primarily to density inhomogeneities in the basaltic shell itself. Orig. art. has: 10 figures.

SUB CODE: 08/ SUBM DATE: 20Nov65/ ORIG REF: 025

Card 2/2

ACC NR: AT7003834 SOURCE CODE: UR/3169/66/000/018/0046/0057

AUTHOR: Chekunov, A. V.

ORG: Geophysics Institute AN UkrSSR (Institut geofiziki AN UkrSSR)

TITLE: Orekhovo-Pavlograd deep fault and its continuation in the Russian Platform and in the Alpine geosynclinal zone

SOURCE: AN UkrSSR. Geofizicheskiy sbornik, no. 18, 1966. Geofizicheskiye issledovaniya stroyeniya zemnoy kory (Geophysical investigations of the structure of the earth's crust, 46-57

TOPIC TAGS: tectonics, geologic exploration, physical geology, earth crust

ABSTRACT: An investigation of the Orekhovo-Pavlograd zone and similar zones of the Ukrainian sheild revealed that they are Precambrian deep fault zones. These zones are not limited to the shield and are traced within adjoining structures of early post-Proterozoic age, bounding them and dividing them into separate blocks, and having a definite effect on their geotectonic zonation, facies distribution, development of volcanism, and location of mineral resources. The Orekhovo-Pavlograd deep fault is an especially large ancient lineament which is traced from the NNE to the SSW for a distance of more than 1200 km through the most diverse geological regions, from the Dnepr-Donets depression to the folded structures of Turkey. It interesects the entire thickness of the Earth's crust, dividing it into large blocks,

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ACC NR: AT7003834

and is rooted in the Earth's mantle, from where the basic and ultrabasic materials is injected into the upper levels of the crust. Movements are still occurring along this deep fault. Orig. art. has: 3 figures.

SUB CODE: 08 / SUBM DATE: 15Apr65 / ORIG REF: 055

Card 2/2

ACC NR: AR6024835 SOURCE CODE: UR/0169/66/000/004/G003/G003

AUTHOR: Subbotin, S. I.; Gurevich, B. L.; Kuzhelov, T. K.; Sollogub, V. B.; Chekunov, A. V.; Chirvinskaya, M. V.

TITLE: The plutonic formation on the territory of the Ukrainian SSR according to data from a geophysical study

SOURCE: Ref. zh. Geofizika, Abs. 4G13

REF SOURCE: Sb. Geol. rezul'taty prikl. geofiz. Geofiz. issled. stroyeniya zemn. kory. M., Nedra, 1965, 56-59

TOPIC TAGS: geological survey, area description, geomagnetic field

ABSTRACT: The main relationship between the anomalous gravitational field and the geological structure of the territory in question is the linearity of the field in the regions of deep submersion of the Precambrian foundation and the mossaic-like arrangement of the shallow surface Precambrian bed. The geomagnetic field anomlies mainly reflect the internal structure of the Precambrian foundation, i.e., Proterozoic folded linear regions and prehistoric plutonic localized objects of the basic and ultrabasic rock. In the regions where large subcambrian deposits were formed the geomagnetic field anomalies mainly reflect the presence of shallow effusive bedrock. A large number of plutonic breaks and "feathered" cracks were established from the data of seismometry, gravimetry, and by other geophysical methods. The thickness of the

Card 1/2 UDC: 550.311(477)

ACC NR: AR6024835

Earth's core and the depth of the Konrad surface bed are estimated from the seismic and gravimetric data and foundation rocks. Generally speaking the geophysical methods are very important in the exposure of structural forms at various depths and in the detailed study of large and small tectonic elements. [Translation of abstract]
M. Speranskiy

SUB CODE: 08

Card 2/2

ACC NR: AT6034514 SOURCE CODE: UR/0000/66/000/000/0156/0162

AUTHOR: Sollogub, V. B.; Chekunov, A. V.; Pavlenkova, N. I.

ORG: none

TITLE: Structure of the Earth's crust in the southern Ukraine based on deep seismic sounding data

SOURCE: AN SSSR. Otdeleniye nauk o Zemle. Nauchnyy sovet po kompleksnym issledovaniyam zemnoy kory i verkhney mantii. Glubinnoye stroyeniya Kavkaza (Abyssal structure of the Caucasus). Moscow, Izd-vo Nauka, 1966, 156-162

TOPIC TAGS: Mohorovicic discontinuity, granitic layer, basaltic layer, earth crust, seismic velocity, crystalline basement, seismology, tectonics / Ukraine

ABSTRACT: The results are presented of regional seismic investigations conducted in the southern Ukraine in 1961—1962 by the correlation method of refracted waves and deep seismic sounding using continuous profiling. Borehole and available geophysical data were utilized in compiling a structural schematic map of the Crimean Plateau and Prisivash'ye along the surface of the Paleozoic basement. It was established that the basement has a block structure. A system of submeridional and sublatitudinal faults disects the territory into a number of large structures. The Paleozoic basement lies at depths ranging from 0—1 to 6—9 km. The seismic data do not confirm that the transverse Perekop uplift is the boundary between the Karkinitskaya and Sivashskaya depressions. The Novo-Tsarin gravity anomaly is

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attributed to the deep-seated fault containing intrusions of basic and ultrabasic rocks. A seismic-geologic iron section of the Earth's crust along the voronzh massif—Black Sea profile was prepared from available deep-seismic data. Up to 4 interfaces with boundary velocities between 6.6 and 7.1 km/sec have been established at depths of 1.5 to 10 km below the crystalline basement in the area of the southern slope of the Ukrainian shield. The basaltic layer with a boundary velocity of 6.6—7.4 km/sec is found along the whole profile at depths between 5—8 and 18—20 km. The Mohorovicic discontinuity with a boundary velocity of 8.1—8.2 km/sec was also traced along the whole seismic line. The depth to the Mohorovicic discontinuity varies from 22—30 km in the region of the Black Sea to 45—50 km in the Crimean Mountains and the Dnieper-Donets aulowgene. Orig. art. has: 2 figures. [WA-794]

SUB CODE: 08/ SUBM DATE: 26Feb66/ ORIG REF: 023/

Card 2/2

L 6987-66 EPF(c)/EWP(j)/EWA(c)/EWT(m) RM/ JXT(cz)

ACC NR: AP5020241 SOURCE CODE: UR/0188/65/000/004/0066/0072

37
B

AUTHOR: Bazhulin, P. A.; Chekunov, A. V.

ORG: Department of Optics (Kafedra optiki)

TITLE: Investigation of the dependence on the concentration of the intensity of the infra-red band absorption of pyridine in solution

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 4, 1965, 66-72

TOPIC TAGS: pyridine, absorption band, infra-red absorption, hydrogen bonding

ABSTRACT: Studies were made on the absorption in the infra-red band of pyridine in several solutions. The most important solvents were those containing the OH group (ethyl alcohol chiefly). Other solvents were carbon disulfide, chloroform, bromoform, acetone and carbontetrachloride, which do not contain the OH group. In solvents not containing the OH group little change is noted in the spectra. When ethyl alcohol is used as a solvent, however, a new band absorption is noted corresponding to the complexing of pyridine with ethyl alcohol molecules. This is due to the

Card 1/2 UDC: 535.34

L 6987-66

ACC NR: AP5020241

hydrogen bond formed between the two molecules. A new line appears at v = 1000 which is absent in pure pyridine and in neutral solvents. Two lines at 1000 Å and 991 Å vary in intensity with pyridine concentration but their position does not. When deuterium oxide is used there is some frequency displacement. Two other lines appear due to complexing when iodine is the solvent. The intensity, displacement and half width of infra-red bands as functions of the concentration and characteristics of the solvents were investigated since intensity data is lacking elsewhere. The concentration dependence of the index of absorption (K_ω) and the half width ($\Delta\nu_0$) of certain lines corresponding to frequencies of vibration of functional groups in pyridine was noted. Solutions were examined in a cuvette and corrections made for its thickness. The index of absorption was found proportional to the optical density, concentration, and thickness of the cuvette. A chart gives the intensities of certain wavelengths in solution of carbontetrachloride, chloroform, acetone, and bromoform as a function of concentration. The spectra is also shown for pure pyridine and in ethyl alcohol solution in a small range. Internal energy and temperature functions are used throughout and the index of absorption is related to the concentrations of the pure material and the complexes. The log of the index of absorption varies linearly with the reciprocal of the temperature. Orig. art. has: 9 formulas, 4 figures and 1 table.

SUB CODE: OP,GC/ SUBM DATE: 29Apr64/ ORIG REF: 005/ OTH REF: 007

Card 2/2 nda

L 10859-66 EWT(m)/EWP(j)/EWA(c) IJP(c) RM
ACC NR: AP5028255 SOURCE CODE: UR/0379/65/001/004/0536/0540

AUTHOR: Chekunov, A. V.; Bazhulin, P. A.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosuniversitet)

TITLE: Study of intermolecular interaction between pyridine and iodine by means of infrared absorption spectra

SOURCE: Teoreticheskaya i eksperimental'naya khimiya, v. 1, no. 4, 1965, 536-540

TOPIC TAGS: pyridine, iodine, IR spectrum, intermolecular complex

ABSTRACT: The intensity, width, and shift of the most characteristic absorption bands of pyridine were studied in ternary systems (pyridine + iodine + solvent), and the data obtained were used to determine the equilibrium constant (K) and binding energy (U). Spectra of the solutions were recorded with an IKS-14 spectrometer with an NaCl prism. The solvents were CCl_4, methylene chloride, and bromoform. An increase in the intensity of the ν_{12} IR band of pyridine indicated the formation of a complex between the latter and iodine; this was confirmed by measurements of the binding energy. From the results obtained, some conclusions are drawn concerning the magnitude of the shift of the vibrational frequency ν_1; it is postulated that the degree of shift of ν_1 in the complex characterizes the strength of the

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ACC NR: AP5028255

21,44,55

intermolecular bond. Orig. art. has: 4 figures, 1 table, and 6 formulas.

SUB CODE: 07/ SUBM DATE: 07Apr65 / ORIG REF: 004 / OTH REF: 011

Card 2/2

UL'YANOV, I.A., inzh.; SOLDATENKOV, A.P., inzh.; DMITRIYEV, V.K., inzh.; MASKIN, M.G., inzh.; POZIGUN, L.V., inzh.; DUKTOVSKAYA, O.A., inzh.; CHEKUNOV, I.N., inzh.; LIOKUMOVICH, Ye.F., inzh.; KAPITONOVA, Z.I., inzh.; LEVITSKIY, Ya.B., otv. red.; ROMANOVA, L.A., red. izd-va; OVSEYENKO, V.G., tekhn.red.

[Coals of the U.S.S.R.]Ugli SSSR; spravochnik. Moskva, Gos gortekhizdat, 1962. 318 p. (MIRA 15:11)

(Coal)

L 5308-66 EWT(m)/EWP(v)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c) IJP(c) JD/HM/HW
ACC. NR: AP5025755 SOURCE CODE: UR/0286/65/000/018/0120/0120

AUTHORS: Lotsmanov, S. N.; Krivun, G. M.; Chekunov, I. P.; Uspenskiy, B. N.; 32
Osval'd, F. V.; Bordovskikh, N. S. B

ORG: none

TITLE: Silverless solder for soldering copper and its alloys. Class 49, No. 174931

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 120

TOPIC TAGS: solder, copper, copper alloy, tin, nickel, cobalt, manganese

ABSTRACT: This Author Certificate presents a silverless solder for soldering copper and its alloys. The solder contains tin, phosphorus, and copper. To improve the density and strength of the soldered joint and to lower the soldering temperature, nickel or cobalt (up to 1%) and manganese (up to 0.5%) are added to the solder, while the remaining components are taken in the following proportions: tin- 10-15%, phosphorus- 4-5%, copper- remainder.

SUB CODE: IE, MM/ SUBM DATE: 24Dec62/ ORIG. REF: 000/ OTH REF: 000

Card 1/1

0901 0614

YAKOVLEV, Georgiy Semenovich; TRAPER, Ye.I., inzh., retsenzent; CHEKUNOV, K.A., inzh., retsenzent; BOYTSOV, A.Ye., nauchnyy red.; CHICHKANOVA, V.S., red.; ERASTOVA, N.V., tekhn. red.

[Marine electric power systems] Sudovye elektroenergeticheskie sistemy. Leningrad, Gos.soiuznoe izd-vo sudostroit.promyshl., 1961. 351 p. (MIRA 14:12)

(Electricity on ships)

L 02014-67 EWT(1)

ACC NR: AM6006947 (N) Monograph UR/ 32 B+1

Chekunov, Konstantin Artem'yevich

Electric drives of ships (Sudovyye elektroprivody) [Leningrad] Izd-vo "Sudostroyeniye", 1965. 339 p. illus., biblio. 3300 copies printed. Textbook for students at shipbuilding institutes.

TOPIC TAGS: shipbuilding engineering, dc electric motor, electric generator unit, electric drive, marine engineering, motor generator, ac motor

PURPOSE AND COVERAGE: This textbook has been approved by the Ministry of Higher and Special Secondary Education of the USSR for students in shipbuilding technicums who are following courses on ship electric maritime equipment. This volume and its presentation of material may also be used for students in the correspondence departments of technicums, as well as for students in shipbuilding institutes who are not pursuing electrical specialties, and shipyard workers. The first part of the book deals with general theoretical problems of ship electric drives, start, braking, and control methods of electric ship motors. A brief study of transients and load diagrams of electric drives is given, and also the principles of electric motor design for various operational conditions are presented. In the second part of the book, the problems of operation and design

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ACC NR: AM6006947 O

of basic electric mechanisms for ships are discussed and standard circuit diagrams for control of electric motor are listed.

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